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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,851	12/11/2003	Mark Rosenzweig	EURO-251 (86084.014200)	9009
7590	04/04/2006		EXAMINER GREENE, JASON M	
Michael I. Wolfson Greenberg Traurig, LLP 200 Park Avenue New York, NY 10166			ART UNIT 1724	PAPER NUMBER
DATE MAILED: 04/04/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/733,851	<b>Applicant(s)</b> ROSENZWEIG, MARK	
	<b>Examiner</b> Jason M. Greene	<b>Art Unit</b> 1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/31/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

### ***Response to Arguments***

1. Applicant's arguments filed 23 January 2006 have been fully considered but they are not persuasive.

With regard to Applicants' argument that Martin fails to teach a sensor monitoring the pressure drop across the filter or the pressure between the filter and the motor, the Examiner contends that Martin explicitly teaches such a sensor in col. 7, lines 46-65 and col. 10, line 53 to col. 11, line 10. Specifically, Martin teaches the discharge sensor (142) being actuated in response to an increase in pressure drop across the filter (102) caused by clogging. While the Examiner recognizes that the sensor of Martin does not physically measure the pressure drop across the filter, the sensor nonetheless actuates the switch in response to an increase in pressure drop. In other words, Martin reads on claim 1 since the discharge sensor (142) activates the switch when an increase in pressure drop across the filter causes the pressure difference between the dust collecting compartment (70) and the discharge chamber (58) to exceed a certain threshold. Martin likewise reads on claim 12 since the sensor (142) measures the

Art Unit: 1724

pressure between the filter and motor (i.e. in compartment 70) and activated the switch in response thereto.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the filter being other than a bag filter) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

***Claim Rejections - 35 USC § 102***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-3, 5-7 and 12-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Martin.

With regard to claims 1 and 2, Martin discloses a filter monitor for sensing the condition of a filter (dust bag 72) in a vacuum cleaner (20) connected to a power source (electrical plug 28), the vacuum cleaner having a flow chamber (dust collecting compartment 70) between the filter and a flow inducing device (motor driven fan unit 58)

Art Unit: 1724

selectively driven by the power source, comprising an electrical circuit (146) including a pressure actuated switch (switch 184 in discharge sensor 142), and an indicator light (46) visible to the user connected to the circuit, wherein the pressure actuated switch is closed to complete the circuitry between the indicator and electrical power source in response to an increase in pressure drop across the filter indicating that the filter requires cleaning or replacement in Figs. 1, 4 and 6 and col. 4, line 30 to col. 9, line 48.

With regard to claim 3, Martin disclose the circuit including a resistor (178) to reduce voltage across the circuit to a level compatible with the indicator in Fig. 6 and col. 9, lines 29-48.

With regard to claim 5, Martin discloses the pressure actuated switch (184) including a pressure chamber with a pair of electrical leads (not numbered) and a conductive member (not numbered) spaced from at least one lead and biased away from the other at least one lead, wherein the conductive member is displaced to contact both leads in response to an increase in pressure drop across the filter resulting in a decrease in pressure in the vacuum chamber due to clogging of the filter in Figs. 4 and 6, col. 6, lines 35-50 and col. 9, lines 13-48.

With regard to claim 6, Martin discloses the filter monitor including a port (the port connecting an area downstream from the filter bag to the dust bag pressure sensor 122)

Art Unit: 1724

connected to the vacuum cleaner downstream the filter in Figs. 1, 4 and 6 and col. 4, line 30 to col. 9, line 48.

With regard to claim 7, Martin discloses the circuit including a latching relay (160), said latching relay being latched when the indicator (46) is connected to the power source by the pressure actuated switch in Fig. 6 and col. 10, line 52 to col. 11, line 10.

With regard to claims 12 and 15, Martin discloses a vacuum cleaner (20) having a serviceable filter (dust bag 72) and a monitor for sensing the condition of the filter, comprising a housing (canister 24) for mounting a motor (not numbered, see col. 5, lines 39-41), a nozzle housing (intake opening 66 on base 62) for receiving an intake device (hose 34 of handle 36), a filter (the dust bag 72) disposed between the nozzle housing and the motor, an indicator light (46) for indicating a need to service the filter, and circuitry (146) connecting the indicator light to a power source including a pressure actuated switch (switch 184 in dust bag pressure sensor 142) that completes a circuit between the power source and the indicator when the pressure between the filter and motor indicates a filter condition suggesting cleaning or replacement in Figs. 1, 4 and 6 and col. 4, line 30 to col. 9, line 48.

With regard to claim 13, Martin discloses the pressure actuated switch (184) including a pressure chamber with a pair of electrical leads (not numbered) and a

Art Unit: 1724

conductive member (not numbered) spaced from at least one lead and biased away from the other at least one lead, wherein the conductive member is displaced to contact both leads in response to an increase in pressure drop across the filter resulting in a decrease in pressure in the vacuum chamber due to clogging of the filter in Figs. 4 and 6, col. 6, lines 35-50 and col. 9, lines 13-48.

With regard to claim 14, Martin discloses the circuit including a latching relay (160) for latching the indicator (46) in an indicating condition after a pressure indicating a need to clean or replace the filter has been detected in Fig. 6 and col. 10, line 52 to col. 11, line 10.

4. Claims 1, 2, 12 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by German Published Patent Application DE 36 43 378 A1.

With regard to claims 1 and 2, DE 36 43 378 A1 discloses a filter monitor for sensing the condition of a filter (6) in a vacuum cleaner connected to a power source, the vacuum cleaner having a flow chamber (22) between the filter and a flow inducing device (motor 4) selectively driven by the power source, comprising an electrical circuit including a pressure actuated switch (32), and an indicator light (60) visible to the user connected to the circuit, wherein the pressure actuated switch is closed to complete the circuitry between the indicator and electrical power source in response to an increase in

Art Unit: 1724

pressure drop across the filter indicating that the filter requires cleaning or replacement in Figs. 1 and 2 and the English language abstract.

With regard to claims 12 and 15, DE 36 43 378 A1 discloses a vacuum cleaner having a serviceable filter (6) and a monitor for sensing the condition of the filter, comprising a housing (2) for mounting a motor (4), a nozzle housing (7) for receiving an intake device (10), a filter (6) disposed between the nozzle housing and the motor, an indicator light (60) for indicating a need to service the filter, and circuitry connecting the indicator light to a power source including a pressure actuated switch (32) that completes a circuit between the power source and the indicator when the pressure between the filter and motor indicates a filter condition suggesting cleaning or replacement in Figs. 1 and 2 and the English language abstract.

***Claim Rejections - 35 USC § 103***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1-3, 5-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurz in view of Martin.



With regard to claims 1 and 2, Kurz discloses a filter monitor for sensing the condition of a filter in a vacuum cleaner (appliance 24) connected to a power source (the 220V source connected to terminals 29a and 29b) the vacuum cleaner having a flow chamber including the filter and a flow inducing device (a motor and a fan) selectively driven by the power source, comprising an electrical circuit (see Fig. 2) including a pressure actuated switch (S), and an indicator light (lamp 22) visible to the user connected to the circuit, wherein the pressure actuated switch is closed to complete the circuitry between the indicator and electrical power source in response to an increase in pressure drop across the filter indicating that the filter requires cleaning or replacement in Figs. 1-3 and col. 3, line 1 to col. 5, line 20.

Kurz discloses the filter monitor being disposed in a vacuum cleaner and the pressure actuated switch being disposed adjacent the vacuum pressure source (the flow inducing device, see col. 3, lines 29-31). While it is very well known that it is customary to design vacuum cleaners such that the filter is upstream from the flow inducing device, Kurz is silent as to the specific construction of the vacuum cleaner and thus does not explicitly disclose the vacuum cleaner having a flow chamber between the filter and the flow inducing device.

Martin teaches disposing the flow-inducing device (58) downstream from the filter (dust bag 72) such that there exists flow chamber (70) between the filter and the flow inducing device in Fig. 4.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the upstream filter arrangement of Martin into the

Art Unit: 1724

vacuum cleaner of Kurz to allow the filter to collect dust prior to the air reaching the motor to increase the life expectancy of the motor, as is well known in the art.

With regard to claim 3, Kurz disclose the circuit including a resistor (R1) to reduce voltage across the circuit to a level compatible with the indicator in Fig. 2 and col. 4, lines 16-22.

With regard to claim 5, Kurz discloses the pressure actuated switch (S) including a pressure chamber with a pair of electrical leads (contact element 15 and lead connecting point 31) and a conductive member (contact pin 15) spaced from at least one lead and biased away from the other at least one lead, wherein the conductive member is displaced to contact both leads in response to an increase in pressure drop across the filter resulting in a decrease in pressure in the vacuum chamber due to clogging of the filter in Figs. 1-3 and col. 3, line 1 to col. 5, line 20.

With regard to claims 6 and 8-10, Kurz discloses the pressure actuated switch including an ambient air port (13a) to an ambient air source, and wherein the pressure actuated switch is actuated when a predetermined pressure differential exists between the ambient air pressure and air flow downstream of the filter (adjacent the vacuum pressure source), wherein the filter monitor includes a port (adjacent 41) connected to the vacuum cleaner downstream of the filter in col. 3, lines 25-31 and col. 4, line 49 to col. 5, line 2.

With regard to claims 12, 15 and 16, Kurz discloses a vacuum cleaner (appliance 24) having a serviceable filter and a monitor for sensing the condition of the filter, comprising a housing (24) for mounting a motor, a nozzle housing (inherent) for receiving an intake device, a filter, an indicator light (incandescent bulb 22) for indicating a need to service the filter, and circuitry (see Fig. 2) connecting the indicator light to a power source including a pressure actuated switch (S) that completes a circuit between the power source and the indicator when the pressure between the filter and motor indicates a filter condition suggesting cleaning or replacement in Figs. 1-3 and col. 3, line 1 to col. 5, line 20.

Kurz discloses the pressure actuated switch being disposed adjacent the vacuum pressure source (the flow inducing device, see col. 3, lines 29-31). While it is very well known that it is customary to design vacuum cleaners such that the filter is upstream from the flow inducing device, Kurz is silent as to the specific construction of the vacuum cleaner and thus does not explicitly disclose the vacuum cleaner having a flow chamber between the filter and the flow inducing device.

Martin teaches disposing the flow inducing device (58) downstream from the filter (dust bag 72) such that the filter is disposed between the nozzle housing (66) and the motor in Fig. 4.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the upstream filter arrangement of Martin into the

Art Unit: 1724

vacuum cleaner of Kurz to allow the filter to collect dust prior to the air reaching the motor to increase the life expectancy of the motor, as is well known in the art.

With regard to claim 13, Kurz discloses the pressure actuated switch (S) including a pressure chamber with a pair of electrical leads (contact element 15 and lead connecting point 31) and a conductive member (contact pin 15) spaced from at least one lead and biased away from the other at least one lead, wherein the conductive member is displaced to contact both leads in response to an increase in pressure drop across the filter resulting in a decrease in pressure in the vacuum chamber due to clogging of the filter in Figs. 1-3 and col. 3, line 1 to col. 5, line 20.

With regard to claims 7, 11 and 14, Kurz et al. does not disclose the circuit including latching means, said latching means latching the indicator in an indicating condition when said indicator is connected to said power source by the pressure actuated switch after a pressure indicating a need to clean or replace the filter has been detected.

Martin discloses the circuit including a latching relay (160), said latching relay latching the indicator (46) in an indicating condition when said indicator is connected to said power source by the pressure actuated switch after a pressure indicating a need to clean or replace the filter has been detected in Fig. 6 and col. 10, line 52 to col. 11, line 10.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the latching relay of Martin into the circuit of Kurz to provide a steady burning indicator light once the pressure threshold is exceeded to ensure that the operator does not fail to observe a intermittently activated indicator light and to increase the life expectancy of the indicator light by preventing the light from experiencing multiple on-off sequences which can lead to premature failure due to thermal stress, as is well known in the art.

7. Claims 4 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin, DE 36 43 378 A1, or Kurz in view of Martin as applied to claims 1 or 12 above, and further in view of Naquin, Jr.

Martin, DE 36 43 378 A1, and Kurz do not disclose the indicator being an audible indicator or a light emitting diode.

Naquin, Jr. discloses a similar air filter monitor wherein the indicator is an audible alarm or a LED in Fig. 3 and col. 2, line 7 to col. 4, line 28.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the audible alarm of Naquin, Jr. into the filter monitors of Martin, DE 36 43 378 A1 or Kurz in view of Martin to allow an operator to be alerted of the clogged filter condition even if they are not looking at the vacuum cleaner, as is well known in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the LED of Naquin, Jr. into the filter monitors of

Martin, DE 36 43 378 A1, or Kurz in view of Martin to provide a light having a long life and a low energy requirement, as is well known in the art.

### ***Conclusion***

8. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 31 October 2005 and 03 November 2005 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609.04(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Greene whose telephone number is (571)

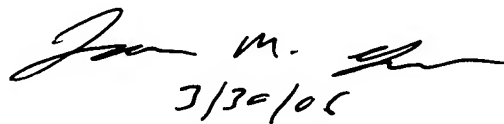
Art Unit: 1724

272-1157. The examiner can normally be reached on Monday - Friday (9:00 AM to 5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason M. Greene  
Primary Examiner  
Art Unit 1724

Handwritten signature of Jason M. Greene and the date 3/30/06.

jmg  
March 30, 2006